

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP03/16444

**A. CLASSIFICATION OF SUBJECT MATTER**  
Int.Cl<sup>7</sup> H03F1/32, H03F3/68

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
Int.Cl<sup>7</sup> H03F1/32, H03F3/68

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
Jitsuyo Shinan Toroku Koho 1996-2004 Kokai Jitsuyo Shinan Koho 1971-2004  
Jitsuyo Shinan Koho 1922-1996 Toroku Jitsuyo Shinan Koho 1994-2004

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 01/39367 A1 (TELEFONAKTIEBOLAGET LM ERICSSON), 31 May, 2001 (31.05.01), Page 11, line 12 to page 12, line 25; Fig. 3 & EP 1104093 A1 & AU 1749201 A & JP 15-516013 A	1-11
Y	JP 2002-124840 A (Mitsubishi Electric Corp.), 26 April, 2002 (26.04.02), Par. Nos. [0049] to [0054]; Figs. 5 to 8 (Family: none)	1-11
Y	JP 11-145734 A (Harris Corp.), 28 May, 1999 (28.05.99), Par. Nos. [0007] to [0008]; Figs. 1 to 2 & EP 899870 A1 & US 6054895 A1 & CA 2244640 A1	1-11

Further documents are listed in the continuation of Box C.  See patent family annex.

* Special categories of cited documents:	
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier document but published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search 24 March, 2004 (24.03.04)	Date of mailing of the international search report 13 April, 2004 (13.04.04)
Name and mailing address of the ISA/ Japanese Patent Office	Authorized officer
Facsimile No.	Telephone No.

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**C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,A	JP 2003-37451 A (TRW Inc.), 07 February, 2003 (07.02.03), Full text; all drawings & EP 1271765 A2 & US 2002/186078 A1 & CA 2389489 A1	1-11